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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/695,442

10/29/2003

Kenji Ueyama

50024-021

4582

20277

7590

09/18/2006

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EXAMINER

KAHELIN, MICHAEL WILLIAM

ART UNIT

PAPER NUMBER

3762

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,442

Applicant(s)

UEYAMA, KENJI

Examiner

Michael Kahelin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 8-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 20060616; 20060804.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 8-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/5/2006.
2. Applicant's election without traverse of claims 1-7 in the reply filed on 7/5/2006 is acknowledged.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 3-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The "first storage device", "accelerometer", "second storage device", "alarm sound output device", and "alarm display device" are all lacking a structural relationship to the other elements of the apparatus. A system cannot be merely a listing of parts. In regards to claims 6 and 7, it is unclear how the portable device receives a "given alarm signal" because nothing has been set forth to provide an alarm signal.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Sun et al. (US 5,861,019, hereinafter "Sun").

7. In regards to claim 1, Sun discloses a portable ECG system comprising a stacked circuit board (Fig. 15), an EGM measurement device, and a radio communication device that transmits an EGM in real time (col. 8, line 66). Further, the stacked-layered circuit board comprises a plurality of circuit boards (30 and the internal circuitry disclosed at col. 8, line 30 and by reference of US 5,470,345), a ground layer between the plurality of circuit boards (48 and col. 10, line 37), wherein the EGM measurement device is on one side of the board (internal to the device) and the radio communication device (30) is arranged on the other side. Please note that Sun's device meets the limitations of "stacked-layered circuit board" because it comprises a circuit and is stacked.

8. In regards to claim 2, the device comprises a casing that houses the EGM, radio communication device, and stacked layer circuit board (col. 10, line 48).

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9. In regards to claim 3, the device comprises a first storage device that stores ECG data (col. 8, line 42).

10. Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by Mok et al. (US 2003/0109905).

11. In regards to claim 1, Mok discloses portable ECG device with a stacked-layered circuit board having a plurality of circuit boards and a ground layer (21) between any of the plurality of boards (Fig. 3), further having an ECG measurement device (24A and 24B) and a radio communication device (27) on opposite sides of the stacked-layered circuit board.

12. In regards to claim 2, the device further comprises a casing (Fig. 2).

13. In regards to claim 3, the device further comprises a first storage device (36).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sun. Sun discloses the essential features of the claimed invention including an activity sensor (col. 8, line 34) and a programmer for uplink telemetry with the ECG device (col. 8, line 15). Sun does not disclose that the activity sensor is an accelerometer, the external

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programmer has a second storage device, or that the portable ECG outputs an alarm sound or display in response to an alarm signal. It is well known in the art to provide ECG devices with accelerometer activity sensors to provide a simple, low-cost means to correlate physical activity with heart activity; storing uploaded data in a memory in programmers to allow the data to be later analyzed or displayed; and outputting an alarm sound or display in response to an alarm signal to notify a patient of a possible adverse condition. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Sun's invention with an accelerometer activity sensor to provide a simple, low-cost means to correlate physical activity with heart activity; means for storing uploaded data in a memory in programmers to allow the data to be later analyzed or displayed; and means for outputting an alarm sound or display in response to an alarm signal to notify a patient of a possible adverse condition.

16. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mok. Mok discloses the essential features of the claimed invention including a second memory (60) and an audio/visual alarm (61). Mok does not disclose a device comprising an accelerometer or that the radio communication device receives alarm signals. It is well known in the art to provide ECG monitors with accelerometers to provide a simple, low-cost means to correlate physical activity with heart activity and to provide ECG monitors with alarm signals to indicate to the user such conditions as low battery and electrode fault. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Mok's invention

with an accelerometer to provide a simple, low-cost means to correlate physical activity with heart activity and to provide the radio communication device with alarm signals to indicate to the user such conditions as low battery and electrode fault.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Weinberg (US 5,674,260) is one of many teachings of providing an accelerometer activity sensor and Mok et al. (US 2003/0109905) is one of many teachings of providing ECG devices with visual and auditory alarms.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kahelin whose telephone number is (571) 272-8688. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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9/15/06

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GEORGE R. EVANISKO
PRIMARY EXAMINER

9/15/06